GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:364
ANSWERED ON:22.07.2015
National Mission for Bamboo Applications
Rai Shri Prem Das

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Government has implemented a National Mission for Bamboo Application;

(b) if so, the aims and objectives of the Mission;

(c) the details of funds allocated/released/spent on its implementation during the last three years and the current year;

(d) whether the mission has achieved its objectives; and

(e) if so, the details thereof and if not, the steps taken by the Government in this regard?

Answer

MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES
(SHRI.Y. S. CHOWDARY)
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(a) Yes, Madam. Department of Science and Technology (DST) has implemented the National Mission on Bamboo Applications (NMBA), during the Tenth Plan, to provide impetus to the bamboo sector and facilitate realisation of its considerable potential. It was implemented as a Technology Mission under the Technology Information, Forecasting & Assessment Council, an autonomous institution of DST. After successful interventions in the Tenth Plan, the Mission was approved for continuation during the entire Eleventh Plan period and subsequently also for 2012-13 and 2013-14. NMBA ceased to exist as a Mission in 2013-14.
(b) Following were the aims and objectives of NMBA:
â€¢ develop value-added bamboo based products, practices, technology and processes
â€¢ promote innovative design capability and fabrication techniques
â€¢ improve industry-lab-user linkages
â€¢ develop small and medium enterprises
â€¢ empower people and communities
â€¢ skill development

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(c) The details of funds allocated to NMBA and spent during the last three years of the Mission are as follows:

Year	Funds Allocated (in Rs. Lakhs)	Funds Spent (in Rs. Lakhs)
2011-12	2500.00	1715.76
2012-13	900.00	1652.85
2013-14	1010.00	245.24

(d) Yes, Madam. The Mission has achieved most of its objectives.

(e) Ever since NMBA came into existence in 2004, several technologies were developed, validated and implemented, some of which are as follows:

â€¢ Composite − development of new products including matboards, floorboards etc. and associated processes.
â€¢ Preservation of bamboo through pressure treatment technology.
â€¢ Design and development of prototypes of primary and secondary processing machinery for bamboo applications.
â€¢ Development of processing and packaging technologies for edible shoots and developing technology package for community level processing.
â€¢ Evaluating neutraceuticals, antimicrobial and anti-carcinogenic properties of bamboo shoots.

â€¢ Technology, validation and commercialization for bamboo-based thermoplastics.
â€¢ Development of prototype and testing of bamboo dust based pelletizing machines.
â€¢ Development of macro and micropropogation techniques of bamboo species- Guadua angustifolia.
â€¢ Extraction of bamboo fiber through pulping route.
â€¢ Utilizing bamboo fiber for non-woven applications such as absorbent material for hygiene application and wound dressing.
â€¢ Designing of process to enhance the storability of bamboo through process of torrification.
â€¢ Development of commercial level kilns for production of bamboo charcoal.
â€¢ Development and standardization of technology for application of natural colorants on bamboo products.
â€¢ Bamboo Polyhouses

The Mission has developed and commercialized fire retardant, disaster proof and easy to install pre-fabricated bamboo-based structures for housing, schools, hospitals and rural sanitation in high altitude areas.

The Mission has been able to establish linkages between the organised and unorganised sectors, between household activity and organised industry. Primary processing of bamboo has been organised at the village level and locations close to bamboo, with basic mechanization and technology inputs. These have been instrumental in providing raw material to secondary processing/ product manufacturing units in a sustained manner, reducing the cost of production

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and generating economic activities, especially in areas and amongst people that are relatively disadvantaged.

NMBA in association with various institutes had developed technology packages and disseminated them through trainings and induction of fixtures and primary processing machineries to ensure skill development at various locations. Training along with skill development had assisted in creating employment, improving livelihood and providing raw material to bigger units. NMBA had provided training for cluster level processing of bamboo shoots, mat weaving, stick making and agarbatti making. Training was provided in Nagaland, Chhatisgarh, Karnataka, Meghalaya, Bihar, Tripura and Orissa. Across the country, 250000 persons have been trained with women being the major beneficiaries.

The NMBA has developed and disseminated lot of information related to bamboo in user friendly formats in the form of publications and video CDs in different languages.

Incremental employment has been of the order of 30 million mandays per annum. As a result of NMBA intervention, value addition in the bamboo sector has increased from 10% to 70%.

More than 40 lakh sq ft of space has been constructed with bamboo boards, most of it for rehabilitation in areas affected by cloudburst (Leh), by Tsunami (Andaman & Nicobar Islands) and by earthquake (J&K). Schools have been constructed using bamboo boards in the Naxal affected areas of Chhatisgarh, housing almost 20,000 children in these Ashram Schools.
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